December-17-12 3:10:51 PM Item ID: D3066-1 Accept *N900040100* Setup Start **Revision ID:** Item Name: Spacer Start Date: 17/12/2012 **Start Qty: 60.00** *60* Cust Item ID: **Required Date:** 02/01/2013 Req'd Qty: 60.00 *60* **Customer:** Reference: Run Process Plan: ____ Date: \2-\2-\3 Tooling: Approvals: Date: QC: _____ Date: ____ SPC (Y/N): _____ Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Work Center ID Description Run Hours Code Qty Qty Number Stamp Draw Nbr Revision Nbr D3066 Rev B 100 0.00 FLOW WATER JET *100* Waterjet 0.00 Memo FLOW CNC Waterjet 1-Cut as per Dwg D3066 Dwg Rev: 3 6061,080 Prog Rev: 2-Deburr if necessary 110 QC2- Inspect parts off machine FAI/FAIB 0.00 *110* 106 0 JM 12=12-19 QC 0.00 Memo Quality Control 120 QC8- Inspect parts - second check *120* 0.00 12 12 19 OC Memo Quality Control

NCR: Y	ullet													
												QA Closed:	Date	:
Nork Orde	er:						DISPOSITION	_		·	AGAINST D	EPARTMENT,	PROCESS	
Part N	Part No.				Rework Scrap Use-as-is The		ı	Skid-tube Crosstube Machining Small Fab Thermoforming Finishing		Water Jet Prod. Eng. Coor. Rec/Store/Packaging		Engineering Quality Other		
NCR N	lo			•	Work Order Update Large Fab Composite]	Supplier					
Root					Des	cri	otion of work order update		nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty		C	or Non-conformance	Ch	Chief Eng Description		cription	Date	Verification	QC Inspector
oc/Data quip/Tooling perator laterial etup ther rocess upplier iraining														·
				·			F	AUL	T CATE	GORY				
Landir	ng Ge	ar					General		-					
Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion			Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration		Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	ct ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other					
j	IT.	urning Se	anence		, [Ì	Finish		Lout of 9	Contioned				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

December-17-12 3:10:51 PM Item ID: D3066-1 Accept *N900040100* Setup Start **Revision ID:** Item Name: Spacer **Start Date:** 17/12/2012 **Start Qty:** 60.00 **Cust Item ID: Required Date: 02/01/2013** Req'd Qty: 60.00 **Customer:** Reference: Run Start Process Plan: Approvals: Date: ____ Tooling: Date: Stop Date: ____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. **Work Center ID** Description **Run Hours** Code Qty Qty Number Stamp 130 Chemical Conversion Coat per QSI005 4.1 0.00 *130* HandFinish Memo 0.00 Hand Finishing 140 spect Part Finish 0.00 QC 0.00 Memo Quality Control 150 Identify as per dwg & Stock Location: WA 0.00 *150* Packaging 0.00 Memo Packaging *** STOCK IN STEP CELL***

											DQA:	Date:	:
NCR:	Yes	/ No				WORK ORDER NON-O	100	NFORM	/IANCE / UPD				
	,										QA Closed:	Date:	
Work Ord	Work Order:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS		
Part No. NCR No.						Scrap Machining Use-as-is Thermoforming		~⊢	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root					Descri	ption of work order update	1	Initial	Actio	on	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Descri	otion	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
*,							AUL	LT CATE	GORY				
Làndi		Gear Bending Centre No Cracks Crushed/ Cuffs Heat Trea	Crimped.		O/S	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink		Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled			Ovalized Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
,	П	Inspectio	n Strip in	Tube		Cut Too Short		Misread	1		Power Loss/	· · ·	Other
		Ripples in	Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

December-17-12 3:10:51 PM

94417

Page 3

Item ID: D3066-1 Accept *N900040100* Setup, Start **Revision ID:** Item Name: Spacer Start Date: 17/12/2012 **Start Qty: 60.00** *60* Cust Item ID: **Required Date:** 02/01/2013 Req'd Qty: 60.00 **Customer:** Reference: Run Start **Approvals:** Process Plan: Date: ____ Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp 160 QC21- Final Inspection - Work Order Release 0.00 *160* QC 0.00 Memo Quality Control

My Pris

NCR: Y	res /	No No				WORK ORDER NON-C	ON	IFORT	MANCE / UPI	DATE	QA Closed:	Date	:		
Work Orde	or.					DISPOSITION	SPOSITION			AGAINST DE	AGAINST DEPARTMENT/PROCESS				
Part No. NCR No.						Rework Scrap Use-as-is Work Order Update	Machining Small Finish			Crosstube Small Fab Finishing Composite	Prod Rec/Stor	Engineering Quality Other			
Root					Descri	ption of work order update	lr	nitial	Act	tion	Sign &				
Cause		Date	Step	Qty	(or Non-conformance	Chi	ef Eng	Descr	ription	Date	Verification	QC Inspector		
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier	_														
Training	_														
Unapproved								- CATE	CORY				<u> </u>		
Landie							AUL	CATE	GURY						
Landir	_	ar ending				General Bend		Grain			Ovalized	Γ-	Pressure/Forced		
	-	_	t Concer	atric to 1	_/s	BOM/Route	-	Grain Hardwa	uro.	-	Ovanzed Over/Under	toloranco	Temperature/Cure		
		racks	Conce	iti it to),3	Broken/Damaged	Н		ion Incomplete	 	Part Incorred		Weld		
	—		rimped.		<u> </u>	Burrs	-	•	ions Incomplete/l	Unclear	Part Lost/Mi	 	Wrong Stock Pulled		
	_	usileu, e uffs	impeu.		<u> </u>	Contamination	_		enance	Officieal	Part Moved	331118			
İ	\vdash	eat Trea	t		-	Countersink	\mathbf{H}	Mislabe		-	Positioned V	Vrong			
	—		· Strip in	Tube	 	Cut Too Short	\vdash	Misread			Power Loss/		Other		
	_	pples in				Drill Holes	\vdash	Offset		<u> </u>	1	9- <u></u>			
	_		aves in E	xtrusio	,	Drawing	\vdash		Calibration						
	_	rning Se				Finish	П	Out of Sequence							

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

December-17-12 3:10:56 PM

Work Order ID: 94417

D3066-1

Parent Item Name: Spacer

94417

D3066-1

Start Date: 17/12/2012

Required Date: 02/01/2013

Start Qty: 60.00

Required Qty: 60.00

Comments:

Parent Item:

IPP: C02.11.01Incorporated D3066-1 IPPKJ/RF IPP Rev:B Now M6061-T6 06-06-23 JLM

Component Item ID/ Replacement Mfg/ Bin Primary Last Unit of Route Qty per Kit Total Qty on Qty Date Item Name Status Item ID Purch Item Location Location Seq ID Measure Hand Issued Qty Issued M6061T6S.080 Purchased No 100 sf 375.7686 0.0945 **

M6061T6S 080

6061-T6 .080 Sheet

Location	Loc Qty	Loc Code	
MAT021	375.768632		
117285	0.248632		
119766	41.32		
120096	168.8		
123279	165.4		123279

Page 1

												DQA:	Da	ite:	
NCR:	Yes	/ No				WORK ORDER NON-O	COL	NFORM	MANCE / UP	DATE			·		
												QA Closed:	Da	ite:	
Work Ord	er.					DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No.				Rework Skid-tube Crosstube Scrap Machining Small Fab		Water Jet Prod. Eng. Coor.			Engineering Quality Other						
NCR No.				Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite		Rec/Store/Packaging Supplier		Other							
Root					Descri	ption of work order update		nitial	Ac ¹	tion		Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verificatio	n_	QC Inspector
Doc/Data															
Equip/Tooling															
Operator															
Material							1								
Setup															
Other				,											
Process												[
Supplier															-
Training															
Unapproved															
						F	AUL	T CATE	GORY						
Land	ng (Gear				General		_				_		_	_
		Bending				Bend		Grain				Ovalized		L	Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	ire			Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	ion Incomplete			Part Incorre	ct		Weld
1		Crushed/	Crimped.			Burrs		Instruct	tions Incomplete/	Unclear		Part Lost/Mi	issing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance			Part Moved			_
		Heat Trea	at			Countersink		Mislabe	eled			Positioned V	Vrong		
		Inspectio	n Strip in	Tube		Cut Too Short	Г	Misread	t			Power Loss/	Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	94417
Description: Spacer	Part Number:	D3066-1
Inspection Dwg: D3066 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

	Actual			Method of	
Tolerance	Dimension	Accept	Reject	Inspection	Comments
+0.005 -0.000	0.125"	_		V	JEMOI
+/-0.010	1.711	_		V	
+/0.010	0,356"	_		V	
+/0.010	0.358"			V	
+/-0.005	2.253"	_		11	
+/0.010	16.450"				Jenu 6
+/-0.010		**		V	55
			· · · · ·		
	-0.000 +/-0.010 +/0.010 +/0.010 +/-0.005 +/0.010	Tolerance Dimension +0.005 -0.000	Tolerance Dimension Accept +0.005 -0.000	Tolerance Dimension Accept Reject +0.005 -0.000 0.125" +/-0.010 0.356" -/0.010 0.358" -/-0.005 2.253" -/0.010 16.450"	Tolerance Dimension Accept Reject Method of Inspection

Measured by:	Jm	Audited by:	SmB	Prototype Approval:	N/A
Date:	12-12-19	Date:	121219	Date:	N/A

A 03.09.22 New Issue P/O D3065-041 KJ/RF	Rev	Date	Change		Revised by	Approved
D 00 00 00 D D 00 D 00 0 0 0 0 0 0 0 0	Α	03.09.22	New Issue	P/O D3065-041	KJ/RF	1
	В	06.06.23	Dwg Rev. changed		KJ/JLM	all



DESIGN DRAWN BY DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA APPROVED, CHECKED DRAWING NO. REV. B D3066 SHEET 1 OF 1 DATE TITLE **SCALE** 06.05.29 **SPACER** 1:3 Α 02.09.11 **NEW ISSUE** В 06.05.29 ADD 6061-T6 MATERIAL

0.000

0.354

RELEASED de de ro

2.600 4.850 7.100 9.350 \emptyset 0.128 (#30) (TYP 8 PLACES) 11.600 13.850 16.096 16.450 0.708 R0.354 (TYP) 0.354 -

D3066-1 SPACER

1) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR: AMS 4025 OR AMS 4027) 0.080" THICK (REF DART SPEC M6061T6S.080)

5052-H32/H34 (PER QQ-A-250/8 OR AMS 4016) 0.080" THICK (REF DART SPEC. M5052H32S.080)

2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1

3) BREAK ALL SHARP EDGES 0.005 TO 0.010

4) PART IS SYMMETRIC ABOUT CENTERLINE 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 6) ALL DIMENSIONS ARE IN INCHES

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